



Water Resilience Portfolio

Comments from the Pacific Forest Trust, September 1, 2019

Healthy Watersheds California – a Regional Water and Climate Resilience Framework

This proposed action integrates the Water Resiliency Portfolio, actionable climate goals for natural and working lands, and California for All rural economic development efforts

California's water security is deeply threatened by the impacts of climate change, and improvements to our state's built water systems or increasing storage through new dams alone cannot solve this. Investments in the state's natural water infrastructure, on which the effectiveness of our built storage relies, is essential. The region that supplies the Oroville and Shasta/Trinity reservoirs—our largest storage for the state—is the backbone of our state water system. Recognized for this function by AB 2551 in 2018, this region supplies the large majority of drinking and irrigated agricultural water, and most of the freshwater for the San Francisco Bay-Delta. It is projected to remain, and indeed increase its function as, the most important region for water supply under climate change, even as other watersheds to the south are more adversely impacted by climate change.

A focused approach to the restoration and conservation of these key source watersheds—comparable to the essential repair and maintenance of built water systems to ensure their function—is essential to improve the security and reliability of our water supply. This will simultaneously restore forests to reduce intense fire risk, increase resilient carbon storage, buffer the climate impacts of more extreme storms and droughts, and promote adaptation and rural economic sustainability. Adopting this new landscape-scale, watershed-wide approach will allow for the assembling of resources: human, institutional, and financial, to efficiently and cost-effectively implement the project.

This proposed action builds on and accelerates efforts already underway. In 2018, the Legislature called for a spatially explicit prioritization planning of watershed restoration needed for this region (see [PRC §71365](#)), and the CNRA has \$2 million set aside for this work. The state can accelerate this, creating an implementation plan with associated financing to enable completion of comprehensive work across this 7 million-acre region over the next 15 years.

Building on [work already done](#) in the region, this proposed action will set up the outreach, landowner agreements, workforce, permitting, stakeholder engagement and financing necessary to restore our most critical watersheds into the best possible condition to serve our needs later this century. The overall implementation planning can be completed in 1.5-2 years, even as some “no regrets” actions known to be necessary can be continued/completed, such as vegetation management around communities, prescribed fire, and conservation actions to protect landscape integrity and function.

The proposed action is a pioneering and innovative application of the tools and approach typically used in large scale infrastructure projects, but applied to the restoration and maintenance of the “green infrastructure” in these critical source watershed areas. It will lay out the “blueprint and specifications” for comprehensive repair and maintenance of these watersheds. As such, it must identify the necessary activities and their costs, develop a specific and actionable plan to achieve the desired condition across the entire area, secure financing for the entire effort, and implement with maximum efficiency. This focused initiative will also drive sustainable employment in this region, supporting an estimated 7,000 good jobs working to prepare us for a more extreme and unpredictable climate. It is worth noting that this single action will deliver more water results (in terms of inflow, storage, flood reduction) and co-benefits, from fire risk reduction to improved water flow to the Delta to wildlife adaptation, than any other single water infrastructure project currently proposed in the state, and do so more cost effectively.

The general framework for the “Healthy Watersheds California” approach to the comprehensive restoration of the Oroville and Shasta/Trinity watersheds is:

1. Complete the assessment and prioritization called for in PRC §71365 and develop an implementation plan and timeline, including a cost estimate in 2021;
2. Develop a financing strategy based on apportioning the cost between the general public and the more specific beneficiaries, including water supply and hydropower. Coordinate state funding into a coordinated account (one was established by PRC §71365(c)). Assess “infrastructure maintenance fees” as appropriate on the direct, legal beneficiaries in order to establish full financing by 2022;
3. Implement actions across public and private land rapidly, to complete the initial treatments within 15 years. A feasible target for 1/3rd completion is within 7 years, allowing for the ramp up in workforce, permitting, and other infrastructure

More specifics on this proposed action are below.

Planning:

- a) Expedite the implementation planning called for in [PRC 71365](#) to develop a spatially explicit prioritization of watershed restoration projects necessary to restore and maintain optimal conditions in these priority watersheds. Note that CNRA has \$2 million from the Regional Forest and Fire Capacity Program appropriation reserved for this.
- b) This implementation plan will lay out a workplan for the next 15 years.
 - a. Outreach to and coordination with landowners, both federal and private to establish their willingness and ability to proceed, including permitting needs and status;
 - b. Sequence project implementation to maximize practicality and efficiency;
 - c. Identify workforce development needs, including potential collaborations with local institutions such as community colleges and relevant businesses;
 - d. Identify key gaps in wood product utilization facilities or other infrastructure necessary to leverage the economic value of the material removed from some forest areas.

Permitting:

- a) Develop programmatic permitting for this region to facilitate the activities described in [Water Code 108.5\(c\)](#): vegetation management, wet and dry meadow restoration, road removal and repair and stream channel restoration and conservation.
- b) Expedite permitting for any facilities or infrastructure necessary to support the comprehensive restoration of this region, such as small diameter wood utilization facilities or appropriately-scaled, Best Availability Technology bio-energy facilities.
- c) Consider any necessary legislative or administrative changes necessary to implement the permitting mentioned above.

Financing:

- a) Using the cost estimate for implementation, apply the same approach used for financing built water system infrastructure: assemble the total funding required through coordinating state grant and general obligation bond funding, as well as revenue bonds or other low-costs financing instruments such as state revolving loan funds or new federal water infrastructure funding programs. Apportion that cost between the General Public, which will support work that is for the general public benefit, the two legal beneficiaries of the water system (water contractors and hydropower generators), and landowners whose land values are improved by the restoration:
 - a. Water Contractors – Establish a charge on the water contractors to finance Revenue Bonds, utilize the SWRCB Revolving Loan Funds, and/or enable other federal program (WIFIA/WIIN) financing to facilitate more timely and cost

- effective financing than through GO bonds alone. This could be a time-limited charge, for example, sunsetting in 20-30 years;
- b. Hydropower producers – Assess a fee for utilizing state water rights in these systems to generate power, creating a charge similar to that for water contractors;
 - c. General Public continues to contribute through bonds and GGRF. These funding sources should be coordinated through the Source Headwaters Fund account established in 2018 (see [PRC 71365\(c\)](#)) and augmented as feasible through mitigation and other relevant fees/fines.
 - d. Landowner contributions can be structured as is typical through cost-share arrangements for restoration work under CFIP.

Implementation:

Recognizing that this work involves several agencies with public trust resource protection responsibility and other relevant mandates, similar efforts in other states have established a single point of coordination, oversight, and management for this scale of watershed work. This entity, a Watershed Authority, has the lead authority and responsibility for meeting implementation timelines and has accountability for the project's quality of work. It is also the entity making annual reports to the Legislature, Administration, and public on progress. For this purpose, representatives of the state agencies that will be permitting or implementing the work should have representation. Relevant federal agencies and beneficiaries can be engaged in an advisory body supporting this entity. A similar effort in New York established a Watershed Authority that empowered a board of local landowners to help administer grants for allowable and desired restoration and conservation projects, helping build local support and engagement.

In the 5-watershed region, the federal government manages some 62% of the land base. While the primary federal agency is the USFS, the BLM also has authority over roughly 500,000 acres, largely in the Pit watershed. To facilitate work in these federally managed areas, an MOU with these agencies could be negotiated to circumscribe the work to be supported and the desired outcomes to ensure that this state-generated funding would accomplish desired goals, rather than simply supplement annual routine operations. This has precedent in other such agreements, and can be implemented through making annually approved block grants to the USFS/BLM administrative units for permitted and shovel-ready projects.

This "Watershed Authority" would:

- a) Aggregate the funding from the various sources, including from the public (general fund, GGRF, bonds, etc.) and beneficiary payments which can be used for financing;
- b) Consistent with the regional Implementation Plan and the MOU on federal lands:

- Work through existing programs such as WCB’s adaptation, restoration, and conservation programs or CalFIRE’s California Forest Improvement Program (CFIP) and Forest Health program to fund restoration and conservation projects on private lands. No new implementing grant programs need to be developed. If desired, both landowner and federal agency and beneficiary advisory councils could be established to increase participation and engagement.
- Make annual block grants for projects on National Forests and BLM lands for restoration actions that are permitted and “shovel ready” or already in implementation but needing funding to complete.
- Annually report to the Administration and Legislature on progress, and develop and maintain a public website with information on ongoing progress and results.

Significant additional work has been conducted around the use of financing mechanisms that are common in “built infrastructure” projects, but which have yet to be applied to restoration of natural infrastructure. We would welcome the opportunity for additional conversation about implementation of this regional source watershed restoration effort. Please contact Laurie Wayburn at lwayburn@pacificforest.org or (415) 561-0700 x14 for further details and follow-up discussions on these comments.